Atty Dkt No: PP01618.003 USSN: 09/728,423

PATENT

<u>AMENDMENT</u>

In the Claims:

The following listing reflects amendments to the claims and replaces all prior versions and listings of claims in this application.

- 1. (Currently amended) A method of eliciting an immune response against a hepatitis C virus (HCV) E2 or E1E2 antigen comprising the step of (a) administering to a subject a composition comprising a polynucleotide encoding an HCV E1E2 antigen or a composition comprising a polynucleotide encoding a full-length E2 antigen, wherein said full-length E2 antigen does not include the p7 polypeptide, wherein the E2 or E1E2 antigen encoded by the polynucleotide is produced intracellularly and not secreted when expressed in cells of the subject.
- 2. (Original) The method of claim 1, wherein the immune response is a humoral immune response.
- 3. (Original) The method of claim 2, wherein the humoral immune response generates at least one neutralization of binding (NOB) antibody.
- 4. (Currently amended) The method of claims 1-3 or claim 7, wherein the <u>composition</u> <u>comprises a polynucleotide that</u> encodes an E1E2 <u>polypeptide antigen</u>.
- 5. (Currently amended) The method of claims 1-3 or claim 7, wherein the <u>composition</u> comprises a polynucleotide encodes a full-length E2 polypeptide <u>antigen</u>.
- 6. (Currently Amended) The method of claims 1-3 or claim 7, wherein the HCV <u>E1E2</u> antigen does not comprise a p7 polypeptide.

Atty Dkt No: PP01618.003

USSN: 09/728,423

PATENT

7. (Currently amended) The method of claim 1, wherein the HCV antigen encoded by the

polynucleotide is selected from the group consisting of amino acids 384-746 of an HCV

polyprotein; amino acids 384-749 of an HCV polyprotein; amino acids 192-746 of an HCV

polyprotein, amino acids 192-809 of an HCV polyprotein; and amino acids 192-749 of an HCV

polyprotein; and amino acids 384-809 of an HCV polyprotein, wherein the amino acids are

numbered relative to HCV-1.

8. (Previously presented) The method of claims 1-3 or claim 7, wherein the

polynucleotide is in a plasmid.

9. (Previously presented) The method of claims 1-3 or claim 7, wherein the subject is

infected with an HCV.

10. (Previously presented) The method of claims 1-3 or claim 7, wherein the subject is

not infected with an HCV.

11. (Previously presented) The method of claims 1-3 or claim 7, further comprising the

step of administering cardiotoxin to the subject.

12. (Previously presented) The method of claims 1-3 or claim 7, wherein the

polynucleotide is administered using a microparticle.

13. (Previously presented) The method of claim 12, wherein the microparticle is a PLG

microparticle.

14. (Previously presented) The method of claims 1-3 or claim 7, wherein the subject is a

mammal.

15. (Original) The method of claim 14, wherein the mammal is selected from the group

consisting of a mouse, a rabbit, a guinea pig, a macaque, a baboon, a chimpanzee, and a human.

-3-

Atty Dkt No: PP01618.003

USSN: 09/728,423

PATENT

16. (Previously presented) The method of claims 1-3 or claim 7, wherein the

polynucleotide is administered using a biolistic delivery device.

17. (Previously presented) The method of claims 1-3 or claim 7, wherein the

polynucleotide is administered by a method selected from the group consisting of intramuscular,

subcutaneous, intraperitoneal, intranasal, oral, and intradermal administration.

18. (Original) The method of claim 3, wherein the neutralizing of binding antibody

inhibits binding of an E2 polypeptide to its cognate receptor by an amount which is greater

relative to binding of the E2 polypeptide to its cognate receptor in the absence of the neutralizing

of binding antibody.

19. (Original) The method of claim 3, further comprising the step of detecting the

neutralizing of binding antibody.

20. (Original) The method of claim 3, wherein the neutralizing of binding antibody

inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:70.

21. (Original) The method of claim 3, wherein the neutralizing of binding antibody

inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:140.

22. (Original) The method of claim 3, wherein the neutralizing of binding antibody

inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:300.

23. (Original) The method of claim 3 wherein the neutralizing of binding antibody

inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:600.

24. (Original) The method of claim 3, wherein the neutralizing of binding antibody

inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:800.

-4-

Atty Dkt No: PP01618.003

USSN: 09/728,423

PATENT

25. (Original) The method of claim 3, wherein the neutralizing of binding antibody inhibits binding of the E2 polypeptide by at least 50% at a dilution of at least 1:3,000.

- 26. (Previously presented) The method of claims 1-3 or claim 7, further comprising repeating step (a).
- 27. (Previously presented) The method of claims 1-3 or claim 7, further comprising administering to the subject a polypeptide encoded by the polynucleotide.